Mumbai University

May - 2018

B.Sc.IT: Semester – V
(Question Paper)
[IDOL – Revised Course]

Paper – IV

Advanced

Java

Time: 3 Hours

Total Marks: 100

N.B.: (1) *All Question are Compulsory.*
    (2) *Make Suitable Assumptions Wherever Necessary And State The Assumptions Made.*
    (3) *Answer To The Same Question Must Be Written Together.*
    (4) *Number To The Right Indicates Marks.*
    (5) *Draw Neat Labeled Diagrams Wherever Necessary.*
    (6) *Use of Non – Programmable Calculator is allowed.*

Q.1 ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) Difference between AWT and Swing. **(5)**

(B) List the different ways of Session Tracking. Write Syntax for Adding Cookie file in Java. **(5)**

(C) What are the various methods of Statement Interface in JDBC? **(5)**

(D) What is Email? Explain the Anatomy of Email message. **(5)**

Q.2 ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

(A) Explain any three Event Classes with their respective Event Listeners. **(5)**

(B) Write a program in Swings to accept the username and password from the user and display message in a Message Box "Valid user" if username and password is "*admin*" else "*Invalid user*". **(5)**

(C) Explain Event Delegation Model with an example. **(5)**

(D) Explain the various Text Components along with its constructors. **(5)**

(E) Create a JTable as follows: **(5)**

Name	Address	Phone
Abc	Lmn	123
pqr	www	456

(F) Write a java program to demonstrate JTree. **(5)**

Q.3 ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

(A) Explain HttpServlet with its Constructors and Methods. **(5)**

(B) Write a Servlet Application to accept a number from the user and display the square and cube of the number. **(5)**

(C) List and explain any 3 interfaces in javax.servlet Package. **(5)**

(D) Why servlet is preferred over CGI. **(5)**

(E) Explain the life Cycle of Servlet. **(5)**

(F) Write a program to demonstrate Session Tracking using HttpSession Interface. **(5)**

Q.4 ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

(A) Explain the type 1 Driver used in JDBC. **(5)**

(B) Explain the Scrollable and Updatable Resultsets in JDBC. **(5)**

(C) List the four Object Scopes in JSP. Demonstrate any one with example. **(5)**

(D) Write a JDBC program that inserts values in database using prepared statement through Keyboard Input. [TABLE NAME: Employee. FIELDS: Empid, Name, Dept, Designation] **(5)**

(E) List and explain various Implicit Objects used in JSP. **(5)**

(F) Write the syntax of various Tags used in JSP. **(5)**

Q.5   ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

(A)   Write a short note on MVC Architecture.   **(5)**

(B)   Explain the advantages of EJB.   **(5)**

(C)   Explain in detail the phases of JSF Life Cycle.   **(5)**

(D)   Explain the Structure of faces-config.xml File.   **(5)**

(E)   Write a Model and Navigation Rules to find the Simple Interest of a given Principal, Interest and terms.   **(5)**
(in JSF)

(F)   List and explain the various types of Beans.   **(5)**

Q.6   ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

(A)   Explain the Structure of hibernate.cfg.xml.   **(5)**

(B)   Explain the importance of Mapping and show the creation of Mapping File Inhibernate Framework.   **(5)**

(C)   Write a short note on Interceptors in Struts.   **(5)**

(D)   Explain Hibernate Architecture.   **(5)**

(E)   What is Value Stack in Struts? State and explain the Execution Flow of Value Stack.   **(5)**

(F)   Explain in detail the Core Components of Struts Framework.   **(5)**

Q.7   ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

(A)   What are Naming and Directory Services?   **(5)**

(B)   Explain the different types of Mail Protocols.   **(5)**

(C)   Write a short note on following: **(5)**
  - *Session in Java Mail.*
  - *Authenticator.*

(D)   Explain the Components of Web Service.   **(5)**

(E)   Write a short note on SOAP.   **(5)**

(F)   Write a short note on Java Mail API.   **(5)**